

## REMARKS

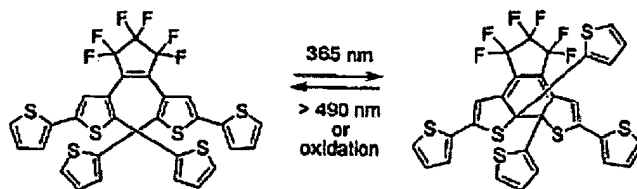
In this paper applicant has amended claims 1, 3-6, 9, 17-20 and 23-27, Cancelled claims 2, 12-16, and added new claims 28-42.

Applicant provisionally elects with traverse the Examiner's Group I which after the subject amendment includes Claims 1, 3-11, 17-19, 23 and 28 through 30 for examination in this application. Applicant also provisionally elects with traverse the species set forth below as requested by the examiner:

- a) Name of Compound:

1,2-bis(2,5-bis(2-thienyl)-3-thienyl)hexafluorocyclopent-1-ene

Structure of reversibly convertible compound:



- b) Location of the species within the claims or within the specification:  
The species can be found, for example, in Example 1 at page 17 (line 20) to page 19 (line 14).
- c) The claims that read on the elected species:  
Claims 1, 3 to 9, 23 to 25, 28 to 30, submitted herewith.
- d) A definition of the exact substitutions:

R1 is F

R2 is F

R3 is  (X=S)

R4 is  (X=S)

R5 is H

- e) One specific use for compounds of formulae I and II:  
The preparation of a polymer having electrochromic and photochromic properties as set forth in new claim 31.

Support for the options for substituents in the compound recited in amended claims 1, 17 to 19, and 25, and new claims 28 to 30 can be found in the teaching of exemplary compounds found throughout the application as filed, for example, Schemes 2 and 5 and the Examples.

Support for the replacement of the terms “photochromic” and “electrochromic” with “photochromical” and “electrochromical” in amended claims 1 and 3 to 6, respectively, can be found, for example, at page 10, lines 3 to 15.

Support for new claims 24 and 25, which have been amended for purposes of clarity, can be found throughout the application as filed.

Support for the use recited in new independent claim 31 can be found throughout the application as filed, for example, Scheme 5 and the Examples.

Support for the polymers recited in new claims 32 to 38 can be found throughout the application as filed, for example Scheme 5 and the Examples.

Support for the uses recited in new claims 39 to 42 can be found in the application as filed, for example, at page 16, lines 10 to 12.

The Examiner alleges that Groups I to IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack a special technical feature. The Examiner stated that Peters *et al.* (Peters, Andrea. Electrochemically induced ring-closing of photo chromic 1,2-dithienylcyclopentenes. The Royal Society of Chemistry. Chem. Comm. 2003 954-955) teach the technical feature of the core chemical structure corresponding to the claims and, therefore, there is no special technical feature in the application.

Applicant respectfully traverses the Examiner’s restriction. Applicant respectfully points out to the Examiner that the first publication of Peters *et al.* was as an Advance Article on the web dated March 12, 2003, which postdates the priority dates of the instant application. As such, Applicant

asserts that the Examiner has incorrectly cited Peters *et al.* as prior art. Applicant, therefore, asserts that the claims are linked by a special technical feature that is not disclosed in the prior art.

The Examiner further alleges that the claims of Groups I to IV are drawn to more than the permissible combinations of different categories of invention as set forth in 37 CFR 1.475(b), and, therefore, states that the claims lack unity of invention.

Applicant respectfully traverses the Examiner's restriction and asserts that the claims should be examined together, as they meet the requirement under PCT Rule 13.1 and 13.2 and 37 CFR 1.475 for belonging to permissible combinations of different categories. Specifically, Applicant asserts that the currently pending claims are directed to certain compounds (both monomeric and polymeric forms) comprising a common core chemical structure, that are interconvertible between a ring-open isomer and a ring-closed isomer, under photochemical and electrochemical conditions. Accordingly, Applicant asserts that the claims are directed to different forms of a single product, a process specially adapted for the manufacture of said product, and the use of said product in electrochromic and/or photochromic material and/or devices. For these reasons, Applicant asserts that the claims should be examined together.

Applicant further asserts that the claims of Groups I and IV are connected by a single, searchable unifying relationship as discussed above, *i.e.*, all claims relate to certain compounds comprising a common core chemical structure, that are interconvertible between a ring-open isomer and a ring-closed isomer, under photochemical and electrochemical conditions, and, in view of this single, searchable unifying relationship, Applicant assert that the Examiner would not be seriously burdened by searching and examining the claims of Groups I to IV in a single application.

In summary, Applicant asserts that not only has the requirement of unity of invention as defined under PCT Rule 13.1 and 13.2 been met in that the claims of Groups 1 to IV share the same special technical feature and belong to permissible combinations of different categories, as described above, but also that the claims of Group I to IV are connected by a single, searchable unifying relationship and that the Examiner would not, therefore, be seriously burdened by searching and examining the



subject matter of these groups in a single application. Accordingly, Applicants respectfully request withdrawal of the restriction of claims 1 to 27.

The Examiner has further alleged that the application contains claims that are directed to more than one species of the generic invention. Applicant respectfully traverses the Examiner's further restriction. As discussed above, Applicant maintains that the pending claims are linked by a structure, that are interconvertible between a ring-open isomer and a ring-closed isomer, under photochemical and electrochemical conditions, and can, therefore, be searched and examined in a single application without seriously burdening the Examiner.

Solely for the purpose of expediting the prosecution of the instant application, however, Applicant has cancelled claims 2 and 12 to 16, without prejudice or disclaimer. Applicant provisionally elects, with traverse, Group I, consisting of amended claims 1, 3 to 11, 17 to 19, and 23. Applicant asserts that new claims 28 to 30 submitted herewith are drawn to compounds of the formulae (I) and (II) and, therefore, should be examined with elected Group I.

Applicant further provisionally elects, with traverse, the species 1,2-bis(2,5-bis(2-thienyl)-3-thienyl)hexafluorocyclopent-1-ene (shown above).

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "C. McClung".

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#### **CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 22, 2009.

Dated: April 22, 2009

A handwritten signature in dark ink, appearing to read "C. McClung".

Charles D. McClung